DEPARTMENT OF AEROSPACE ENGINEERING

SYLLABUS

(CBCS Courses)

2016 - 20

Sub. Code	Name of Subject	Credits
14AE2001	Introduction to Aerospace Engineering	3:0:0
14AE2002	Aerospace Components Drawing	0:0:1
14AE2003	Materials in Aerospace Application	3:0:0
14AE2004	Elements of Avionics	3:0:0
14AE2005	Strength of Aerospace Materials	3:1:0
14AE2006	Aerodynamics	3:0:0
14AE2007	Aerodynamics Laboratory - 1	0:0:2
14AE2008	Aerodynamics Laboratory – 2	0:0:2
14AE2009	CAD Laboratory	0:0:2
14AE2010	Aircraft Instrumentation	3:0:0
14AE2011	Instrumentation and Avionics Laboratory	0:0:2
14AE2012	Aircraft Structures	3:0:0
14AE2013	Aircraft Structures Laboratory	0:0:2
14AE2014	Aircraft Performance	3:1:0
14AE2015	Aircraft Stability and Control	3:0:0
14AE2016	Space Dynamics	3:0:0
14AE2017	Aircraft Propulsion	3:0:0
14AE2018	Propulsion Laboratory	0:0:2
14AE2019	Computational Fluid Dynamics	3:0:0
14AE2020	CFD Laboratory	0:0:2
14AE2021	Gas Dynamics	3:0:0
14AE2022	Rocket Propulsion	3:0:0
14AE2023	Aircraft/Spacecraft Design Project	0:0:2
14AE2024	Computational Structural Analysis Laboratory	0:0:2
14AE2025	Thermal Engineering for Aerospace	3:0:0
14AE2026	Wind Tunnel Techniques	3:0:0
14AE2027	Navigation, Guidance and Control of Aerospace Vehicles	3:0:0
14AE2028	Experimental Stress Analysis	3:0:0
14AE2029	Air Traffic Control and Aerodrome details	3:0:0
14AE2030	Basics of Aerospace Engineering	3:0:0
14AE2031	Introduction to Non Destructive Testing	3:0:0
14AE2032	Aero-elasticity	3:0:0
14AE2033	Advanced space dynamics	3:0:0
14AE2034	Introduction to Hypersonic Flows	3:0:0
14AE2035	Aircraft Systems	3:0:0
14AE3001	Advanced Solid Mechanics	3:0:0
14AE3002	Advanced Computational Fluid Dynamics	3:0:0
14AE3003	Thermodynamics & Heat Transfer	3:0:0
14AE3004	Flight Performance and Dynamics	3:0:0
14AE3005	Orbital Space Dynamics	3:0:0
14AE3006	Advanced Aerodynamics	3:0:0
14AE3007	Advanced Propulsion	3:0:0
14AE3008	Aerospace Structural Analysis	3:0:0

14AE3009	Advanced Avionics	3:0:0
14AE3010	Advanced Computational Fluid Dynamics Lab	0:0:1
14AE3011	Advanced Aerodynamics Lab	0:0:2
14AE3012	Structural Analysis Lab	0:0:2
14AE3013	Aircraft Modelling Lab	0:0:1
14AE3014	Aero Propulsion Lab	0:0:2
14AE3015	Elements of Aerospace Engineering	3:0:0
15AE3001	Aero-elastic Theory	3:0:0
15AE3002	Boundary Layer Theory	3:0:0
15AE3003	Theory of Vibration	3:0:0
15AE3004	Aircraft Design	3:0:0
15AE3005	Flight Control System	3:0:0
15AE3006	Rocket Dynamics	3:0:0
15AE3007	Advanced Aircraft systems	3:0:0
15AE3008	Unmanned Aerial Systems	3:0:0
15AE3009	Finite Element Analysis in Aerospace Application	3:0:0
15AE3010	Advanced Avionics Lab	0:0:1
15AE3011	Linear and Regular Orbital Mechanics	3:0:0
15AE3012	Numerical Methods in Orbit Application	3:0:0
16AE2001	Structural Mechanics	3:0:0
16AE2002	Aircraft Structures – I	3:0:0
16AE2003	Aircraft Structures – II	3:0:0
16AE2004	Cryogenic Propulsion	3:0:0
16AE2005	Industrial Aerodynamics	3:0:0
16AE2006	Introduction to Unmanned Aircraft Systems	3:0:0
16AE2007	Analytics for Aerospace Engineers	3:0:0
16AE2008	Advanced space dynamics	3:0:0
16AE3001	Orbital Space Dynamics	3:0:0
Revised Version Subjects		
14AE2004	Elements of Avionics (V-1.1)	3:0:0
14AE2027	Navigation, Guidance and Control of Aerospace Vehicles (V-1.1)	3:0:0
14AE3009	Advanced Avionics (V-1.1)	3:0:0